

NATURE NOTES FOR JANUARY.

SCALE HOW,

AMBLESIDE.

Saturday, January 17th.—We came back on Thursday to find the roads hard as iron, the hills covered with snow, and Rydal in a perfect condition for skating. A good many of us went there this afternoon and found the ice like glass. The golden-brown colour of the bracken on the hills was very noticeable against the pure white of the snow.

Monday, Jan. 19th.—The weather has completely changed and a silver thaw has set in. The snow is melting rapidly and the rivers are beginning to rise.

Saturday, Jan. 24th.—After four days' incessant rain the sun has at last broken through the heavy clouds. The grass is beautifully green, and every blade sparkles in the sunlight as the glistening drops catch its rays. The Stock is converted from a small but impetuous stream into a rushing, roaring torrent. The muddy brown water comes tumbling down by the Old Mill sweeping all before it, breaking into foam as it throws itself over the boulders. The meadows at the head of Windermere are flooded; the waters of the Brathay and the Rothay have spread far over the fields.

Tuesday, Jan. 27th.—There is a very high wind blowing to-day, and it was quite a struggle to get up the hill to Seathwaite Range. We went to look at Stock Ghyll from the garden. It was lovely, although a great deal of the water has run down since Saturday. The water looked perfectly white as it dashed over the rocks and fell thundering down into the basin below. The spray was blown about by the wind, and all the moss on the rocks was dripping for quite a long way round the falls.

Thursday, Jan. 29th.—To-day is rather dull and misty, and the wind still continues to rush up the valley. We went along the Rydal road this afternoon. Rydal mere was fairly full. We looked out for the Dipper at the head of the lake,

but his little white breast was not to be seen. The tops of the mountains were almost the same colour as the clouds overhead—a soft, dull grey. The hills near to looked quite bright when the sun struggled through the mist and lit up the bracken which still keeps its lovely colour.

Friday, Jan. 30th.—This afternoon we went for a bird walk to Waterhead and home by Dove's Nest Woods.

The lake was very full and the wind was very strong. We went right down to the edge of the lake, and quite large waves came chasing each other in; away out in the middle of the lake was quite a large family of coot, bobbing about in the waves, ducking and diving and chasing each other. They were a good way out from the shore, but with the help of the glasses we could see them quite distinctly. They seemed to enjoy the rough weather thoroughly as they mounted the tops of the waves and dipped down into the furrows.

As we went up through the woods we saw a sweet, wee wren hopping about on the wall, with her tail cocked up in the usual perky way. She flew about on the wall for a long time while we watched her, showing the little row of buttons on each side. The hills were a lovely colour in the distance—the deep, misty blue melting into paler shade where the light fell strongly and the clouds came stealing softly down, covering the Pikes, Conistone Old Man and Wetherlam with a soft, downy quilt. The lake was very rough, and away out in the middle the white crests of the waves could be seen chasing each other towards the shore. The wind came rushing along the road, driving the rustling brown leaves before it, making them skip and jump like children coming out of school. They came hopping towards us, now jumping into the air, then turning somersaults along the road, and settling down for an instant only to be swept up again by another impetuous rush of wind.

January 31st.—It has been raining most of the morning, but just now it seems to show signs of clearing. There is a rift in the dull, leaden clouds above the hills in the distance, through which the pale yellow rays of the watery-looking sun are trying to force their way.

W. T.

DEAR EDITOR,

We believe you are expecting a letter from present students, and now at the last moment have to rack our brains to think of news that may interest you. First let us say how much we are looking forward to the Conference and to meeting many whom we know and have heard of. Miss Wix has received the names of the following:—Misses Parish, Drury, Duyvis, Fountain, Russell, Hertzell, Bell, Lake. She ventures to hope that others who come will not bring too many sisters or friends, in case the rooms should not furnish sufficient accommodation.

You will be glad to hear that Miss Mason seems better this term, and is more amongst us.

We are just settling down into our new dignity as Seniors; but I am afraid the ten new Juniors, who very quickly made themselves at home, do not regard us with quite the reverential awe due to us. They are now fully initiated into the laws of the House, "the place where the impossible is uncomplainingly and successfully done." There is not much to say about them at present, except that they wear the regulation skirt, and are keen walkers on the whole. Mrs. Franklin is staying here, and Olive attends the practising school while their stay lasts.

The entertainments began with a very delightful Burne-Jones evening. This added new interest to many of the pictures in the House.

We are to give another representation of "Antigone," for which we are busy making preparation at the present time.

We like the change of work immensely, and diligently slave at Sloyd on half-holidays.

The Millet house seems somewhat deserted now it is uninhabited, and we hope the cubicles will again be occupied before the end of the year.

We are getting positively hardened to crits, and have begun the year with two "excellent" marks. The school is flourishing, there are new pupils, and there have been several promotions.

Mary Parsons and Norah Clendinnen have left; the latter is to go abroad with her sister Kathleen at Easter.

The weather, an item of great interest to us all, has not been original, although we did get a few days' skating at the

beginning of the term. Stock Ghyll has been exceptionally full.

The head gardener hopes to send some garden news to the next number. The gardens have needed much rearrangement, as there are so few Juniors; most of whom are very enthusiastic about them.

With best wishes for the New Year, from

THE STUDENTS.

THE MYSTERIES OF MATHEMATICS.

There are a great many mathematical truths which are no more to be "understood of the people" than abstruse theological speculations. To the helpless child struggling with the first rules of arithmetic it is sometimes a treat to come upon some of the mysteries which by the time it can do "progressions" it may explain, but which at present will only fascinate. It would be most interesting to make a collection of all the more or less magical manipulations which can be effected by nine. "Casting out the nines" seems simple enough as a hard and fast rule; the mystery lies in the wherefore.

Two arithmetical mysteries are here given in case they are not already known. Would those to whom others are familiar communicate with the Editor, that we may form a collection of them.

1. The puzzler shall ask the victim to write down a row of any given figures, as—

6 4 2 3 1 0

Then, having shown this, another row of the same number of places.

For the third row the puzzler will take the paper and add such figures as added to the second row will make nine.

6 4 2 3 1 0

1 2 5 7 3 4

8 7 4 2 6 5

The victim shall then add another row of figures, and the